

What is claimed is:

1. A robot simulation device, comprising of an input device, a display, a central computer, computing programs, an output device of teaching programs, and following means to simulate whether the robot can transfer an object in a working space where obstacles are located, without any interference in said working space:

- (1) a two-dimensional display having coordinate axes,
- (2) a means to display said obstacles, said working space, a moving robot and said object transferred by said robot, on said display,
- (3) a means to interpolate a path by designating path points of a central point of said moving object,
- (4) a means to display a path wherein said object is moved in said working space, and
- (5) a means to display an interference region of said path and said obstacles.

2. A robot simulation device according to claim 1, further comprising:
a means of measuring and displaying traveling time of said object and said robot, and

a means of displaying a moving picture of said path of said moving object and movable portion of said robot.

3. A robot simulation device according to claim 1 or 2, further comprising,
a means of calculating traveling speed of said object and said movable portion of said robot.

4. A robot simulation device according to any one of claims 1 to 3, wherein said two-dimensional display displays a horizontal plane and or a vertical plane of said working space.

5. A robot simulation device according to any one of claims 1 to 4, wherein said obstacles and said working space are displayed by a polygonal form and / or a circular form.

6. A robot simulation device according to any one of claims 1 to 5, wherein said path of said moving object is calculated by designating a departure point and a destination point of said robot on said display.
7. A robot simulation device according to any one of claims 1 to 6, wherein a route and said path of said moving object is further calculated by designating a departure point and a plurality of destination points of said object on said display.
8. A robot simulation device according to any one of claims 1 to 7, wherein a region where said robot is unable to transfer said object is calculated and displayed by designating a boundary of a movable region of said robot.
9. A robot simulation device according to any one of claims 1 to 8, wherein said output device outputs at least dimensions of said robot, said path of the moving robot, said speed of the robot according to data which is achieved by a simulation.
10. A robot simulation device according to any one of claims 1 to 9, wherein the simulation device further teaches a motion of movable part of the robot.
11. A robot simulation device according to any one of claims 1 to 10, wherein said robot is a scalar type robot and said object is a sheet like plate.
12. A program which depicts said data achieved on the basis of said simulation by said robot simulation device according to any one of claims 1 to 11 on said display, and / or makes a real robot perform given works.